

CLAIMS

1. A device for changing the angle of rotation of a cam-shaft (3) arranged in a cylinder head (1) of an internal combustion engine relative to a drive wheel (14) of the internal combustion engine, including a hydraulic adjusting arrangement (15) which is effective between the drive wheel (16) and the camshaft (3) and is connected to a fluid circuit of the internal combustion engine, such that the fluid admission can be controlled via an on/off valve (5) which is fixed with respect to the camshaft (3), the camshaft (3) being mounted in camshaft bearings (2) by a bearing cover (2b) and covered by a cylinder-head cover (4), said on/off valve (5) being supplied with fluid via the camshaft (3).
2. A device according to claim 1, wherein the on/off valve (5) is arranged in the cylinder head (1) of the internal combustion engine.
3. A device according to claim 1, wherein the on/off valve (5) is arranged in the cylinder-head cover (4) of the internal combustion engine.
4. A device according to claim 1, wherein the on/off valve (5) is arranged in one of the camshaft bearings (2) of the internal combustion engine.
5. A device according to claim 1, wherein the on/off valve (5) is arranged in a crankcase of the internal combustion engine.

6. A device according to claim 1, wherein the on/off valve (5) has at least one fluid inlet opening (7), at least one fluid outlet opening (8) for supplying the hydraulic adjusting arrangement with fluid and at least one fluid return-flow opening (9).
7. A device according to claim 6, wherein the fluid inlet-, outlet and return flow openings (7 to 9) are connected to fluid bores (10 to 12).
8. A device according to claim 7, wherein the fluid bores (10 to 12) are arranged in an internal combustion engine component, preferably in the camshaft bearing (2).
9. A device according to claim 6, wherein the fluid inlet (7) into the on/off valve (2) extends in the direction of a vertical axis (13) of the engine.
10. A device according to claim 6, wherein the fluid inlet (7) opens from below or from above into the on/off valve (2).